

Abstract

A filter matrix is provided which substantially overlies a broiler at a selective distance therefrom for reducing volatile particulate matter and organic compounds in broiler smoke. The filter matrix comprises at least one filter screen layer horizontally disposed above the broiler for arresting the broiler frame, and a stack of at least two expanded metal filter layers, the first of which is contiguous to the filter screen layer which is directly above the broiler. Each of the filter screen layers, and each of the expanded metal filter layers have a plurality of apertures defined therein arranged in an array, and the layers are stacked in such a manner that when the broiler smoke is passing through the filter matrix, the pathway of the broiler smoke is labyrinthine. The filter matrix may be mounted in a frame. A plurality of frames may be removably mounted in a casing, or hinged together for easy cleaning.